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Aug 12, 2004

Re: Application No. 10/031,942 - Notice of appeal and brief in support

Dear Sir/madam,

Attached are notice of appeal for application No. 10/031,942 plus fee in pto-2038, and brief in support of the appeal in triplicate plus fee in pto-2038.

Note that if some amendment is required within a month, since I am outside the US, paper mail may be too slow, so contact by faster means would be required. If you send me a fax, please alert me about by e-mail (it is in my work place), if we need to speak by phone, it will be best if you e-mail the number and time that would be best for calling you.

Thanks,

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6 Aug 2004

Re: Application No. 10/031,942 - appeal brief

1) *Party of interest:* Yehouda Harpaz (sole inventor).

2) *Related appeals and interferences:* Appeals for 10/031,890 and 10/031,776 are dealing with similar issues.

3) *Status of claims:* Claim 1-3 - cancelled.

Claims 4-5 - rejected.

The appeal is against the rejection of Claims 4-5.

4) *Status of Amendments:* The claims are amended to remove a spurious reference to "games manager". Note that this amendment is with respect to the claims as they are after applying the examiner's amendment in p.2 of the final action, and that as a result of the examiner's amendment the independent claim is claim 5.

5) *Summary of the invention:* An electronic board which is played by touching points, with a novel behaviour. The behaviour is that when point is pressed, points in a prespecified pattern around the touched points which are illuminated in the current player's colour are switched off, and the same for the other colour, but using a different pattern. This gives a game in which each player tries to switch off the other player's points without switching off his own points.

6) *Issues:* The rejection of under USC 112 is fixed by eliminating the spurious reference to "games manager". The rejection of Claim 5 under the doctrine of double patenting is based on ignoring the behaviour that is described in the claims. The rejection of Claims 5 and 4 under USC 103 is based on finding in preceding documents only small part of the elements that appear in the claims.

7) *Grouping of Claims:* Claim 4 should be regarded as separate from claim 5 in the consideration of the rejection under USC 103.

8) *Argument:*

(a) Claim rejections - 35 USC 112

(a.1) In the last amendment of the claims, I left by mistake the words "games manager" inside Claim 4. I fixed this by removing these words in the claims that are attached in the appendix.

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(b) Double Patenting

(b.1) The rejection for double patenting with respect to Harpaz 6,568,683 was mentioned in the non-final rejection, and I explained why it is wrong in my reply. The final action ignored my explanation.

(b.2) Claim 5 is patentable over 6,568,683, because it describes a very different behaviour. The main difference is that in 6,568,683 the behaviour of the board is “fluid”, i.e. the pattern of illumination changes even when the player(s) don’t press any point (column 3 line 47). This is the main novelty of 6,568,683 (explained in column 3, lines 53-58), and appears in its Claim 1 in column 8, lines 12-16. In contrast, the behaviour of the board in Claim 1 of the current application is “non-fluid”, i.e. the illumination pattern changes only when a player presses a point. Thus a board that behaves “fluidly” is outside the scope of Claim 5 but inside the scope of 6,568,683. conversely, a board that behave only “non-fluidly” is outside of the scope of 6,568,683 but, if it behaves according to the second half of claim 5, inside the scope of Claim 5. Hence each of the scopes of 6,568,683 and Claim 5 extend beyond the other scope, therefore they are patentably distinct, and Claim 5 is patentable over 6,568,683.

(b.3) In addition, in 6,568,683 pressing a point affects only its illumination (column 8, lines 17-19), while in Claim 5 a pattern of points around the pressed point is affected. This also separates the scopes of 6,568,683 and Claim 5.

(b.4) The examiner reached his conclusion because he completely ignores the behaviour in the discussion.

(b.5) the same is true for the provisional rejections. In the case of 10/031,776, the differences are:

(i) In the current application, a point is always a legal move, while the point of 10/031,776 is that an unilluminated point may or may not be a legal move (i.e. may or may not be switched on).

(ii) In the current application, when a player touches a point, a pattern of points around the point is affected (some of them are switched off). In 10/031,776, only the touched point changes.

(b.6) Thus a board that whenever an unilluminated point is touched some points around this point are switched off is in the scope of the current application, but not in the scope of the 10/031,776. Conversely, a board that checks the legality of a move as described in the current application and if it is legal switched the point on is in the scope of 10/031,776, but outside the scope of the current application. Thus each of 10/031,776 and the current application has a scope that extends outside the scope of the other, therefore neither of them encompasses the other, and they are patentably distinct. .

(b.7) The same is true about application 10/031,890, where the difference is whether points are switched on or off. A board which switches on points when a point is touched is inside 10/031,890, but outside the scope of the current application, and a board which switches points off is inside the scope of the current application but outside the scope of 10/031,890. Therefore they are patentably distinct.

(c) Claim Rejections - 35 USC 103: Claim 5

(c.1) The action claims that the behaviour that is described in claim 5 is unpatentable over Blumberg *et al* in view of Lites out! However, this conclusion is reached by ignoring most of the elements in the behaviour that is described in the second half of Claim 5.

(c.2) The element that *is* found in Blumberg *et al* is changing a pattern around the pressed point. However, the following elements are not found either in Blumberg *et al* or in Lites out!:

(a) Using different patterns for the two colours.

(b) Switching the patterns between the colours in each turn (point press).

Because the current colour changes each turn, the pattern that is applied to a colour is the one for the current colour in one point press and the other pattern in the next point press.

(c) The changes are only switching off of points.

(d) The game ends when there are illuminated points only of one colour (and because points are only switched off, most of points are switched off).

*Note that the action mentioned that in Blumberg *et al* they suggest ending with all points switched on, but that is a different condition.*

(e) The colour of the illuminated points in the end is the winner.

(c.3) These elements make very little sense or no sense at all within the setting of Blumberg *et al* and Lites out!, because these are not set up for two-players games. Even if assume two-players games (which is not an obvious thing to do with the settings of Blumberg *et al* or Lites out!), elements (a), (b) and (c) are still not obvious, and using the combination of all them is very non-obvious.

(c.4) The action reaches its conclusion because elements (a), (b) (c) and (e) that were listed in (c.2) are completely ignored. Element (d) is not ignored, but the example that the action mentions, ending with all points lit, is wrong. The action also says that in this case “the player would have the majority of the lights on”, but that is again a different condition from (d). Note again that I don’t consider element (d) to be non-obvious, but it is novel. The non-obvious elements are (a), (b) and (c) (which were completely ignored in the action), and the combination of all of the elements together.

(c.5) The action mentions Weiner *et al* as well, but this does not add any of the elements that were listed in (c.2) above, and is therefore does not reduce the obviousness of the current application.

(d) Claim Rejections - 35 USC 103: Claim 4

(d.1) Claim 4 introduces specific patterns to use. These patterns are clearly novel. They are non-obvious, because people would tend to opt for patterns which are made of points which are in direct contact with the point that the pattern is around, or points in some simple pattern, e.g. a ‘+’ pattern or a ‘x’ pattern. This is specially true for experts in the field of stones-on-grid games, because in all of these games (Othello, Go, ConnectFour, Rolit) the rules are based on direct contact points. Therefore patterns like the ones that are described in Claim 4 are unlikely to occur both for experts and for non-experts, and are therefore non-obvious.

(d.2) Note also that just selecting some random patterns is not a good idea, because not every pattern will give an interesting game. It is also not useful to offer users of the board a large range of possibilities, because users are not going to search for the right pattern. They will simply go and play with something else. Thus finding good patterns is important part of designing the board, and require both inventiveness and a lot of work of testing the patterns to see if people like them.

(d.3) The action argues against claim 4 by arguing that Blumberg *et al*, and also Weiner *et al*, suggest using various patterns. However, what is claimed in claim 4 is a *specific* pattern, which is novel and non-obvious. While Blumberg and Weiner suggest using various patterns, there is nothing in these patents that looks even close to the patterns that are disclosed in claim 4.

(d.4) The combination of claim 5 with claim 4 gives a construction that is less obvious than claim 5 on its own. Therefore for judging non-obviousness, claim 4 should considered separately.

Yehouda Harpaz



9. Appendix - Claims

1-3 (cancelled)

4 (currently amended) A board as described in Claim 5, where the arrangement of the points is square, and when a player presses a point the ~~game manager~~ board switches off points of the player's colour which can be reached from the pressed point by moving three point along the line or the column that the pressed the point is in and then moving two points in orthogonal direction, and points of the opponent's colour which can be reached from the pressed point by moving two points along the row or the column and then moving one point in an orthogonal direction.

5 (Previously presented) An electronic board comprising a grid of grid points on a flat surface, where each grid point is a visible element which is capable of detecting when it is pressed, and an illumination source inside or below the surface which is capable illuminating the visible element by either of two colours;

which exhibits a behaviour which makes it useful for playing various games;

and in one of these games the behaviour of the board is as follows:

the game starts with an equal number of points illuminated in each of the two colours;

when a player presses a point, the board switches off points in the current player's colour that are in a fixed pattern with respect to the pressed point and points in the other colour that are in another fixed pattern with respect to the pressed point, and then makes the other colour the current player's colour;

when all the points that are illuminated are illuminated in the same colour, the board declares the player of this colour as winner.